Editorial

In January 2013, David Yost and I took on the role of being joint Editors of the *Gazette* of the Australian Mathematical Society. We thank the previous joint Editors, Amie Albrecht and Kevin White not only for the professional job they have done for the last three years, but also for doing everything they could to make the transition to new editors as smooth as possible. David and I also thank Eileen Dallwitz, Production Editor, for holding our hands as we learn the ropes and for being so thorough with the production of the *Gazette*.

First and foremost, David and I would like to emphasize that the *Gazette* is here to serve the members of AustMS — so if you would like changes in content or emphasis or presentation, please do let us know.

The Editorial provides an opportunity to highlight items within this issue and draw attention to matters which may impact on mathematicians especially in Australia, or mathematics in the news.

No doubt the biggest item of news is that 2013 has been dedicated as a special year for the Mathematics of the Planet Earth (MPE) (international site http://mpe2013.org; Australian site http://mope.org.au). This is a wonderful opportunity to showcase mathematics and to educate not only the public, but each other, on the importance and relevance of mathematics. MPE is discussed several times in this issue of the *Gazette*. Give some thought to how you can contribute to the success of the MPE year.

Of particular relevance to Australian mathematics is the Decadal Plan for the Mathematical Sciences referred to in the NCMS report by Nalini Joshi. Once again you have an opportunity to contribute.

The President of the Australian Mathematical Society, Peter Forrester, refers to the falling number of members of our Society and he and the Council are looking for ways to reverse this trend. How can the Society better serve the mathematicians of Australia? Should the nature of the Annual Meeting be changed? Are you being served well by the small specialist meetings supported by the Australian Mathematical Society? Don't be afraid to express your views to the President or the Council members.

This issue of the *Gazette* includes an obituary of Garth Gaudry, a former President of the Australian Mathematical Society, who put substantial effort into organizing mathematicians so that their voices could be heard by Government, as well as influencing high school mathematics syllabi, while continuing to do high quality research. At the end of Garth's obituary is a snippet on Garth's connection with the first fleet.

Mentioning genealogy in the previous paragraph reminds me that too few mathematicians have contributed their data to the Mathematics Genealogy Project www.genealogy.ams.org. This has fascinating information. Do add your own data.

I was able to discover there that the mathematician who started me in research, Ian D. Macdonald, is recorded as a mathematical descendant of Isaac Newton.

I was reading the article 'So what is your Erdös number?' by Jerrold Grossman in the February 2013 issue of *Mathematics Today*, a publication of the Institute of Mathematics and its Applications. In it there are some interesting facts based on information from the comprehensive reviewing journal, *Mathematical Reviews*. It reports that of 0.4 million authors, the median number of papers per author is 2, with over 42% of authors in the database having just one paper, the 60th percentile is 3, the 70th is 4, the 80th is 8, the 90th is 18 and the 95th percentile is 32. The average number of authors per paper is 1.5. These figures are so different from that of other disciplines and should be known by promotion committees.

Recorded in newspapers was the discovery on January 25 2013 by Curtis Cooper of the University of Central Missouri of the largest known prime number, namely the Mersenne prime $2^{57,885,161} - 1$, which has $17,425,170$ digits. The previous largest prime was discovered at UCLA in 2008 and had $12,978,189$ digits. Mersenne primes are named after the French monk, Marin Mersenne; the Mathematical Genealogy project records that he has $88,000$ mathematical descendants including David Hilbert.

Another item recently in the news was the series of four-minute videos prepared by Marcel Jackson of La Trobe University called 'The Algebra of Everything'. They can be found at https://itunes.apple.com/au/itunes-u/the-algebra-of-everything/id392885593. In one these he smashes a calculator with a hammer to show you what is inside.

Last but not least, I mention that this issue records both Australian honours announced on Australia Day and those awarded by the Academy of Science. Congratulations to each of these mathematicians.

Sid Morris, Adjunct Professor, La Trobe University.
Emeritus Professor, University of Ballarat.
Email: morris.sidney@gmail.com

Sid Morris retired after 40 years as an academic. He received BSc (Hons) from UQ in 1969 and PhD from Flinders in 1970. He has held positions of Professor, Department Head, Dean, Deputy Vice-Chancellor, CAO and CEO. He was employed by the universities: Adelaide, Ballarat, Flinders, Florida, La Trobe, UNE, UNSW, UQ, UniSA, Tel-Aviv, Tulane, Wales, and Wollongong. He was Editor of *Bull. AustMS* and *J. Research and Practice in IT*, and founding Editor-in-Chief of *AustMS Lecture Series*. He was on the Council of AustMS for 20 years and its Vice-President. He received the Lester R. Ford Award from the Math. Assoc. America. He has published 140 journal papers and 4 books for undergrads, postgrads and researchers, plus an online book supplemented by YouTube videos, translated into 5 languages, and used in 100 countries. Karl Hofmann and Sid are completing the 3rd edition of their 900-page book *The Structure of Compact Groups*.